

Risk Factors of Cancer in Thyroid Nodes

Abstract

Background and Objectives: Thyroid cancer is responsible for less than 1% of all malignancies and accounts for 5% of the total deaths from the congresses. Also, the differentiated thyroid cancer accounts for about 0.95 total thyroid cancer, which is classified into two types of papillary (PTC) and follicular (FTC). Fortunately, the probability that a single node is malignant is about 5%. Due to the prevalence of nodular goiters and the rareness of thyroid cancer, there is no need for surgical treatment of all cold nodes and determining which patients with thyroid nodules are most likely to benefit from surgery. Therefore, the present study was conducted to determine the various risk factors for malignancy in thyroid nodules.

Methods: In this retrospective study, all patients with thyroid nodule in Fatemi and Imam Khomeini hospitals were enrolled in the study during 2008 to 2016. The questionnaires, such as patient demographics, history of previous illnesses, history of drug use, history of smoking and alcohol, level of education, occupation, pathological outcomes, etc., were completed. Data were collected from patients' files. The collected data were then analyzed statistically.

Results: 200 patients enrolled in this study that 122 (61%) were women and 78 (39%) were male. The mean age of the patients was 51.6 ± 13.7 years, with a range of 12-79 years. According to the gender of the patients, papillary, follicular and medullary cancers were more common in women and papillary cancers were more common in the age group of 21-40 and 41-60 years, respectively.

Conclusion: Based on the results of pathology, 146 benign nodules (73%) and 54 cases of malignant nodules have been reported. (27%). Therefore, in view of the high prevalence of benign nodules, patients can be treated in the absence of known risk factors without surgical methods and using non-invasive methods.

Keywords: Risk Factor, Cancer, Thyroid nodule